

Please delete the paragraph spanning page 77, line 1 through page 78, line 1 and insert therefor:

B 8  
--Recombinant molecule pHis-p22U<sub>608</sub>, containing *D. immitis* p22U nucleotides from about 41 through about 649 operatively linked to *trc* transcription control sequences and to a fusion sequence encoding a poly-histidine segment comprising 6 histidines was produced in the following manner. An about 608-nucleotide DNA fragment containing nucleotides spanning from about 41 through about 649 of SEQ ID NO:3, called p22U<sub>608</sub>, was PCR amplified from a clone containing *D. immitis* p22U using the primers 5' GTTGCAAT- ATGGGATCCAATGAGCC 3' (denoted SEQ ID NO:16 or 22USEN; *Bam*HI site underlined) and 5' CGCTAGTGCAGGATCCTCAATACTC 3' (denoted SEQ ID NO:17 or 22UANT; *Bam*HI site underlined). The PCR product was digested with *Bam*HI restriction endonuclease, gel purified and subcloned into expression vector pTrcHisB (available from Invitrogen) that had been cleaved with *Bam*HI. The resulting recombinant molecule pHis-p22U<sub>608</sub> was transformed into *E. coli* to form recombinant cell *E. coli*:pHis-p22U<sub>608</sub>. The recombinant cell was cultured in shake flasks containing an enriched bacterial growth medium containing 0.1 mg/ml ampicillin at about 37°C. When the cells reached an OD<sub>600</sub> of about 0.3, expression of *D. immitis* p22U<sub>608</sub> was induced by addition of about 1 mM IPTG. Protein production was monitored by SDS PAGE of recombinant cell lysates, followed by Coomassie blue staining, using standard techniques. Recombinant cell *E. coli*:pHis-p22U<sub>608</sub> produced a protein, denoted herein as PHIS-P22U<sub>608</sub>, that migrated with an apparent molecular weight of about 27 kD. Such a protein was not produced by cells transformed with the pTrcHisB plasmid lacking a *D. immitis* DNA insert.--

IN THE CLAIMS:

Please cancel Claims 44, 46-49, 51 and 54, without prejudice or disclaimer of the subject matter therein.

Please amend Claims 43, 45, 50, 52 and 53, without prejudice or disclaimer of the subject matter therein as follows.

B 9  
43. (Once Amended) An isolated monoclonal antibody that selectively binds to a protein comprising amino acid sequence SEQ ID NO:4.

B<sup>10</sup>  
45. (Once Amended) The antibody of Claim 43, wherein said protein selectively binds to immune serum that inhibits *D. immitis* development.

B<sup>11</sup>  
50. (Once Amended) The antibody of Claim 43, wherein said antibody selectively binds to a protein encoded by a nucleic acid sequence SEQ ID NO:3.

B<sup>12</sup>  
52. (Once Amended) A composition comprising an excipient and an isolated monoclonal antibody that selectively binds to a protein comprising amino acid sequence SEQ ID NO:4.

53. (Once Amended) The composition of Claim 52, wherein said composition further comprises at least one component selected from the group consisting of an adjuvant and a carrier.

Please add Claims 55-59 as follows:

55. (Added) An isolated antibody raised using an isolated *D. immitis* p22U protein.

56. (Added) The antibody of Claim 55, wherein said antibody is a monoclonal antibody.

B<sup>13</sup>  
57. (Added) The antibody of Claim 55, wherein said antibody is a polyclonal antibody.

58. (Added) The antibody of Claim 55, wherein said protein is a recombinant protein.

59. (Added) The antibody of Claim 55, wherein said *D. immitis* p22U protein comprises amino acid sequence SEQ ID NO:4.